

- [54] **PORTABLE NAVIGATIONAL PLANNING DEVICE**
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[56] **References Cited**

U.S. PATENT DOCUMENTS

3,924,111	12/1975	Farris	364/443
3,979,057	9/1976	Katz et al.	364/443
4,086,632	4/1978	Lions	364/444
4,156,912	5/1979	Shigeta et al.	364/443
4,521,857	6/1985	Reynolds, III	364/439
4,642,775	2/1987	Cline et al.	364/443
4,677,604	6/1987	Selby, III et al.	369/33

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[57] **ABSTRACT**

The present application discloses an on-demand, porta-

ble mass data storage device useful for navigational planning and other applications. One embodiment comprises a flight planning apparatus having a formatted database and a processor control system which accesses the database in response to user inputs. User inputs are prompted to be coordinated with the formatting of the database to provide for optimal accessing. Particular data records may then be retrieved from the database in response to individualized user inputs, for example, in conjunction with flight planning in which particular approach and other navigational aids must be filtered from a large volume of similar information. In the preferred embodiment, sorting of the information may be done on either a geographic or a named basis. Output of the system comprises information which the user find necessary for the particular planning application. For example, air navigation flight charts may be printed in conjunction with a trip confirmation and an FAA flight plan. Also, ready cross reference between named locations and geographical identification of those named places, such as airway intersections, may be accomplished. Additionally, real time information may be provided through direct phone links. Further, customized cartographic aids may be generated for each user application by review of data in a database and generation of a symbol for particular data records with a corresponding textual identification.

21 Claims, 14 Drawing Sheets

